

ABSTRACT OF THE DISCLOSURE

An ultrasonic inspection instrument for detecting a crack and performing sizing in the depth direction of the crack. By a transmitter element array and a receiver element array included in a common sensor, focus points between focused acoustic fields are electronically scanned in a range including a location where half the sum of the transmitting angle of ultrasonic waves to an inspection-target material and the receiving angle of diffraction echoes from the inspection-target material is 30 degrees, so that a tip portion of the crack is detected from the received diffraction echoes. Thus, the detectability of the ultrasonic inspection instrument for detecting diffraction waves in a subject to be inspected and performing crack inspection is stabilized and kept high.